

CLAIMS:

1. A golf club comprising:
 - a shaft;
 - a grip mounted on an upper end of the shaft; and
 - a club head mounted on a lower end of the shaft, the club head further comprising:
 - a crown;
 - a sole; and
 - a face;wherein the crown is fabricated in a titanium alloy shaped to increase stabilization of the club head, while maintaining a curvature of the crown of the club head of the golf club that is identical to the crown without shaping for increased stabilization.
2. The golf club of claim 1 wherein the club head is shaped such that a slot extends along a rear portion of the crown.
3. The golf club of claim 2 wherein the slot is about 175 mm long with a width that gradually broadens from about 7.5 mm at a heel portion of the crown to about 15 mm at a toe portion of the crown, and a depth that gradually deepens from about 0.3 mm at the heel portion to about 1.5 mm at the toe portion.
4. The golf club of claim 1 wherein the crown is fabricated from β -14 titanium alloy, the sole is fabricated from CT-2 titanium alloy, and the face is fabricated from HT-treated β -2041 titanium alloy.

5. A golf club head having a face, a sole, and a crown, the crown having a rear portion, toe portion, heel portion, and top portion and having a slot that extends from the toe portion, along the rear portion, to the heel portion, the slot having an upper convex portion, a lower convex portion, and a middle concave portion, and wherein the slot improves club head structural integrity.

6. The golf club head of claim 5 wherein the crown is hollow, the crown having an inner surface with an upper concave portion corresponding to the upper convex portion, a lower concave portion corresponding to the lower convex portion, and a middle convex portion corresponding to the middle concave portion.

7. The golf club head of claim 5 wherein the face, sole, and crown are fabricated from at least one titanium alloy.

8. The golf club head of claim 7 wherein the slot in the crown strengthens the titanium alloy.

9. The golf club head of claim 5 wherein the slot is forged on a mold.

10. The golf club head of claim 6 wherein weight is added to at least one of the following including the upper concave portion, lower concave portion, and middle convex portion of the slot.

11. The golf club head of claim 10 wherein the weight stabilizes the golf club head when the golf club head impacts a golf ball.

12. The golf club head of claim 10 wherein the weight changes a center of gravity of the golf club head.

13. A method of forming a golf club head, the method comprising:
forging a sheet of titanium alloy against a mold to forge a crown with a slot, the slot having an upper convex portion, a lower convex portion, and a middle concave portion such that a curvature of the upper and lower convex portions is identical to a curvature of corresponding regions of the upper and lower convex portions on a crown with no slot;
forging a sole of the golf club head;
forging a face of the golf club head; and
welding the sole, face, and crown together to form the golf club head.
14. The method of claim 13 wherein the crown is hollow and the upper convex portion has a corresponding upper concave portion on an inside of the crown, the lower convex portion has a corresponding lower concave portion on the inside of the crown, and the middle concave portion has a corresponding middle convex portion on the inside of the crown, the method further comprising:
adding weight to at least one of the following including the upper concave portion, the lower concave portion, and the middle convex portion of the slot.
15. The method of claim 14 wherein the weight is metal.